

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Canceled)

10. (Currently Amended) A method of detecting malignant cancer in a mammal, comprising the steps of:

(a) detecting a level of Pin1 protein in a test sample; and

(b) comparing the level of Pin1 in the test sample with a level of Pin1 protein in a control sample,

wherein the Pin1 protein comprises the amino acid sequence set forth in SEQ ID NO:2, and a level of Pin1 protein in the test sample higher than the mean plus three times standard deviation of the level of Pin1 protein in the normal sample is indicative of malignant cancer in the mammal.

11. (Previously presented) The method of claim 10, wherein the Pin1 protein level is detected using an antibody having specificity for the Pin1 protein.

12-15. (Canceled)

16. (Currently Amended) A method of detecting malignant cancer in a mammal by assessing the level of Pin1 protein in a test sample from the mammal, comprising the steps of:

(a) contacting the test sample with an antibody having specificity for Pin1 under conditions suitable for binding of the antibody to Pin1 thereby resulting in the formation of a complex between the antibody and Pin1;

(b) detecting the complex between the antibody and Pin1; and

(c) comparing the amount of the complex in the test sample with an amount of a complex between the antibody and Pin 1 in a control sample,

wherein the Pin1 protein comprises the amino acid sequence set forth in SEQ ID NO:2, and an elevation in the amount of the complex between the antibody and Pin1 in the test sample higher than the mean plus three times standard deviation compared to the complex in the control sample is indicative of malignant cancer.

17-38. (Canceled)

39. (Withdrawn) A kit for determining a stage of a malignant cancer in a mammal comprising one or more reagents for detecting a level of Pin1 in a test sample obtained from the mammal.

40. (Canceled)

41. (Withdrawn) A kit for distinguishing between a malignant cancer and a normal cell growth in a mammal comprising one or more reagents for detecting a level of Pin1 in a test sample obtained from the mammal.

42-88. (Canceled)

89. (Previously presented) The method of claim 10 or 16, wherein the cancer is Grade II cancer.

90. (Previously presented) The method of claim 10 or 16, wherein the cancer is Grade III cancer.

91. (Previously presented) The method of claim 10, further comprising the step of:
(c) obtaining from said mammal a second test sample at a later time point wherein a level of Pin1 protein in the second sample different than the level of Pin1 in the first test sample is indicative of progression of malignant cancer in the mammal.

92. (New) The method of claim 1, wherein the malignant cancer is selected from the group consisting of breast, ovarian, prostate, cervical, skin, colon, lung, kidney, liver and testicular cancer.

93. (New) The method of claim 92, wherein the malignant cancer is breast cancer.

94. (New) The method of claim 92, wherein the malignant cancer is prostate cancer.

95. (New) The method of claim 92, wherein the malignant cancer is colon cancer.